



# Hempstead Avenue Safety Enhancements

Presentation to Queens Community Board 13 Transportation Committee

June 16, 2022

# Hempstead Avenue

## Presentation Overview

- Background
- Existing Conditions
- Project Proposal
- Next Steps



Pedestrian mid-block crossing on Hempstead Avenue near  
218<sup>th</sup> Street

---

## Background

# 1

# Background

## Planning Framework

- Freight Mobility Unit is committed to strategies outlined in its strategic plan: *Delivering New York: A Smart Truck Management Plan for NYC*
  - **Safety:** improve the safety of truck travel at intersections and along corridors
  - **Sustainability:** foster the sustainable and environmentally responsible movement of goods
  - **Freight Efficiency:** Improve the efficiency of freight movement to, from, and within NYC
  - **Partnerships & Knowledge:** Grow public and private partnerships to increase knowledge about freight
- DOT is focusing on improving 1,000 intersections to improve safety for all road users
- The Freight unit aims to address truck priority safety corridors; streets where there is a concentration of truck involved crashes with vulnerable road users (pedestrians and cyclists)



Delivering New York Plan



# Freight Mobility Unit Overview

## Freight Toolkit

**What We Do:** Reduce the impacts of trucks on communities and infrastructure while improving the sustainability and efficiency of truck deliveries

**How We Do it:** Wide range of strategies, policies and programs in our toolbox



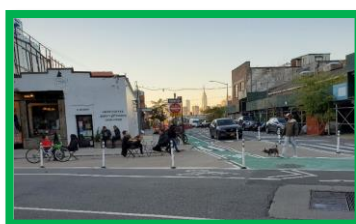
Off-Hour Deliveries



Expand Loading Zones



Truck Route Enhancements



Street Improvement Projects



Truck Electrification & Decarbonization



Truck Safety Education, Outreach, & Partnerships



Truck Safety and Compliance Enforcement Coordination



Microdistribution Hubs



Commercial Cargo Bike Program



Blue Highways

## Project Scope and Motivation



- Hempstead Avenue v is a Vision Zero corridor; between 2015 and 2019 there have been approximately 12 killed or severely injured pedestrians, cyclists, and motorists per mile
- The corridor is a major through truck route that connects Nassau County to New York City
- Hempstead Avenue is a pedestrian priority corridor; there are multiple deficiencies (i.e. long crossings)
- Accessibility to green space along 225<sup>th</sup> Street is limited
- Existing condition of concrete medians pose multiple safety concerns

# Background

## Project Location – Previous Safety Enhancements

### 2016-2017

- LPI added at 217<sup>th</sup> Lane
- Left turn traffic calming installed on Springfield Boulevard at Hempstead Avenue
- Crosswalk markings upgraded to high visibility corridor-wide on Hempstead Avenue

### 2018-2019

- Concrete neckdowns built at NW/SE corners on Springfield Boulevard at Hempstead Avenue
- Signal added at 225<sup>th</sup> Street and 103<sup>rd</sup> Avenue
- One-way conversion of 103<sup>rd</sup> Avenue near 225<sup>th</sup> Street
- Remaining crosswalk markings upgraded to high visibility on Hempstead Avenue

### 2021-2022

- Signal added at Hempstead Avenue and CIP northbound off-ramp
- Signal and new crosswalk added at Hempstead Avenue and 218<sup>th</sup> Street
- Bus bulb installed near 225<sup>th</sup> Street (south curb)
- Crosswalks added near CIP off-ramp area
- New pedestrian ramps installed at 222<sup>nd</sup> Street (NE/NW corners)
- LPIs implemented at 218<sup>th</sup> Street and 221<sup>st</sup> Street
- Intersection control study (for signal installation) opened at Hempstead Avenue and 98<sup>th</sup> Avenue



A new signal and crosswalk was installed on Hempstead Avenue at 218<sup>th</sup> Street in 2021

LPI = leading pedestrian interval  
CIP = Cross Island Pkwy

---

## Existing Conditions

# 2



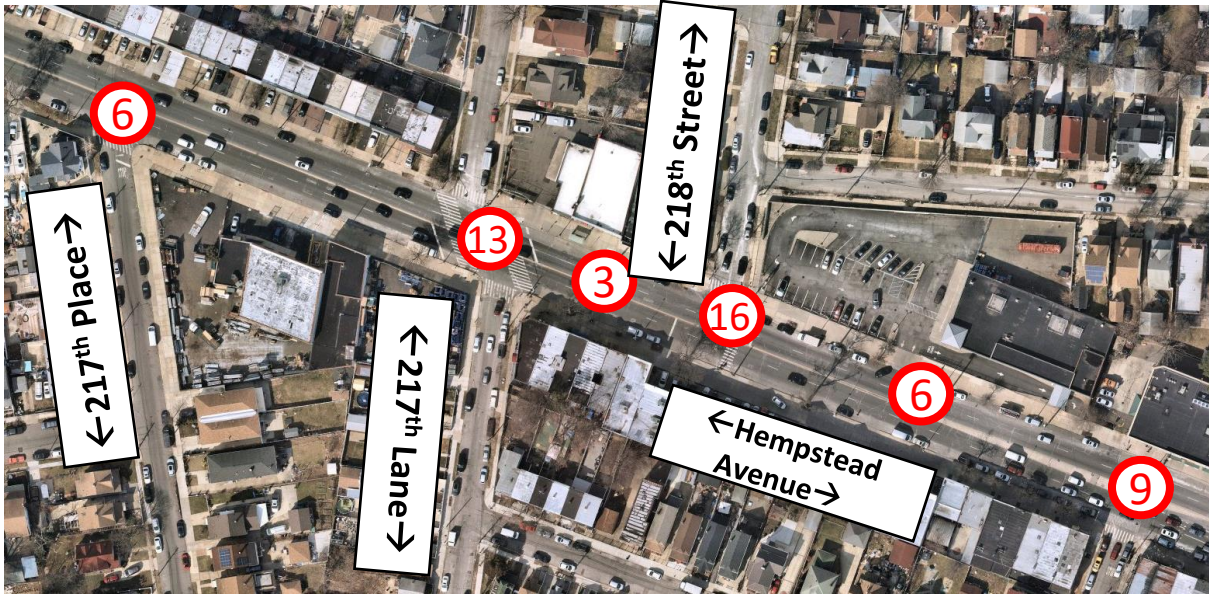
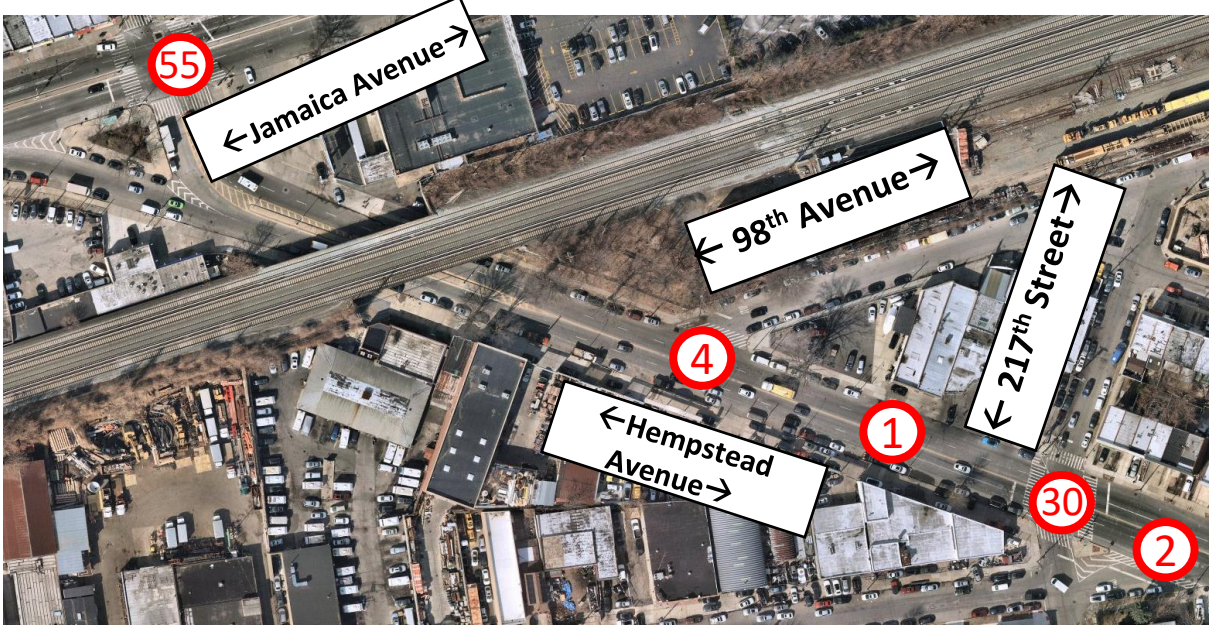
# Crash History

## 2014-2019 (5 Year Summary)

	Total Injuries	Severe Injuries
Pedestrians	7	2
Cyclists	2	0
Motor Vehicle Occupant	83	0
Total	92	2

	Total Injuries	Severe Injuries
Pedestrians	6	0
Cyclists	1	0
Motor Vehicle Occupant	46	4
Total	56	4

Severe injuries document at 98<sup>th</sup> Avenue, 217<sup>th</sup> Street, 217<sup>th</sup> Place, 217<sup>th</sup> Lane and 218<sup>th</sup> Street



Overview of crash locations on Hempstead Avenue (Jamaica Avenue to 218<sup>th</sup> Street)



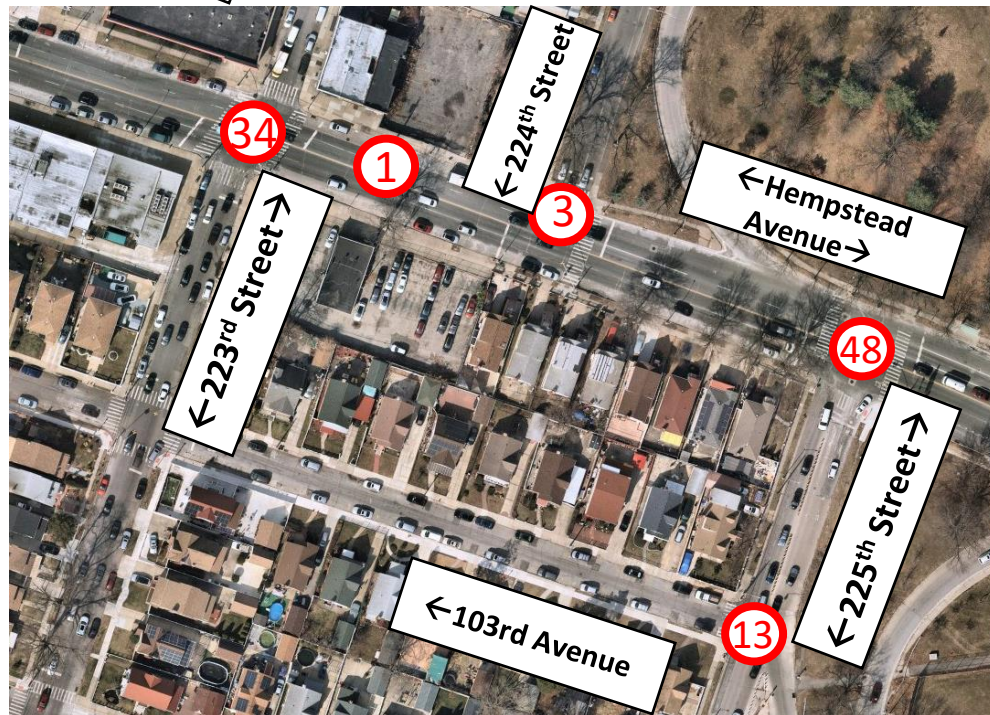
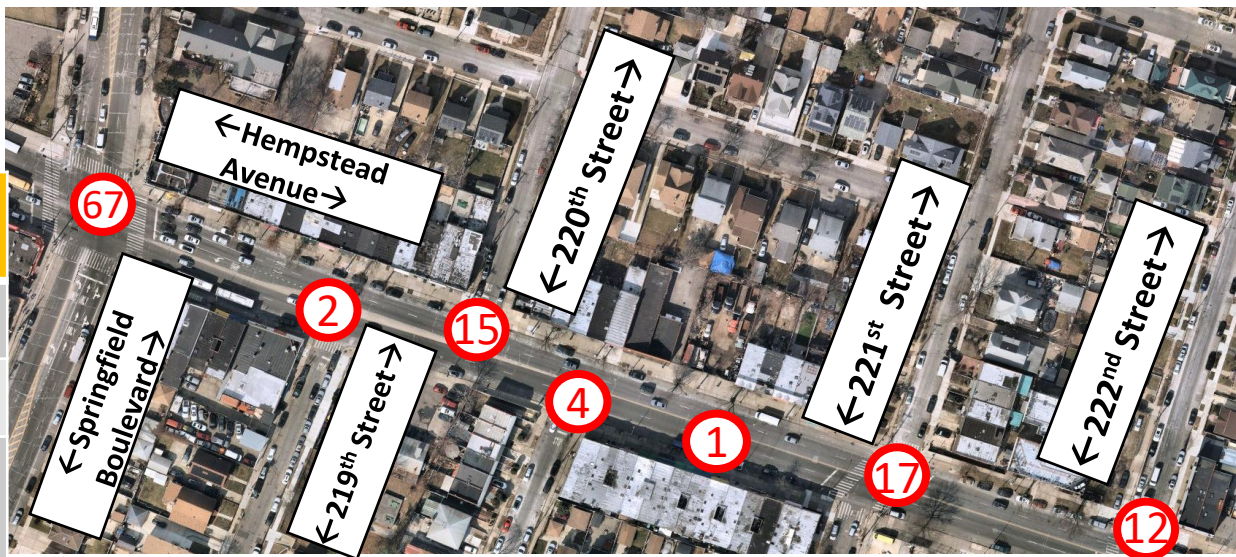
# Crash History

## 2014-2019 (5 Year Summary)

	Total Injuries	Severe Injuries
Pedestrians	22	2
Cyclists	1	0
Motor Vehicle Occupant	95	3
Total	118	5

	Total Injuries	Severe Injuries
Pedestrians	1	0
Cyclists	1	0
Motor Vehicle Occupant	97	2
Total	99	2

Severe injuries document at Springfield Boulevard, 220<sup>th</sup> Street, 221<sup>st</sup> Street and 225<sup>th</sup> Street

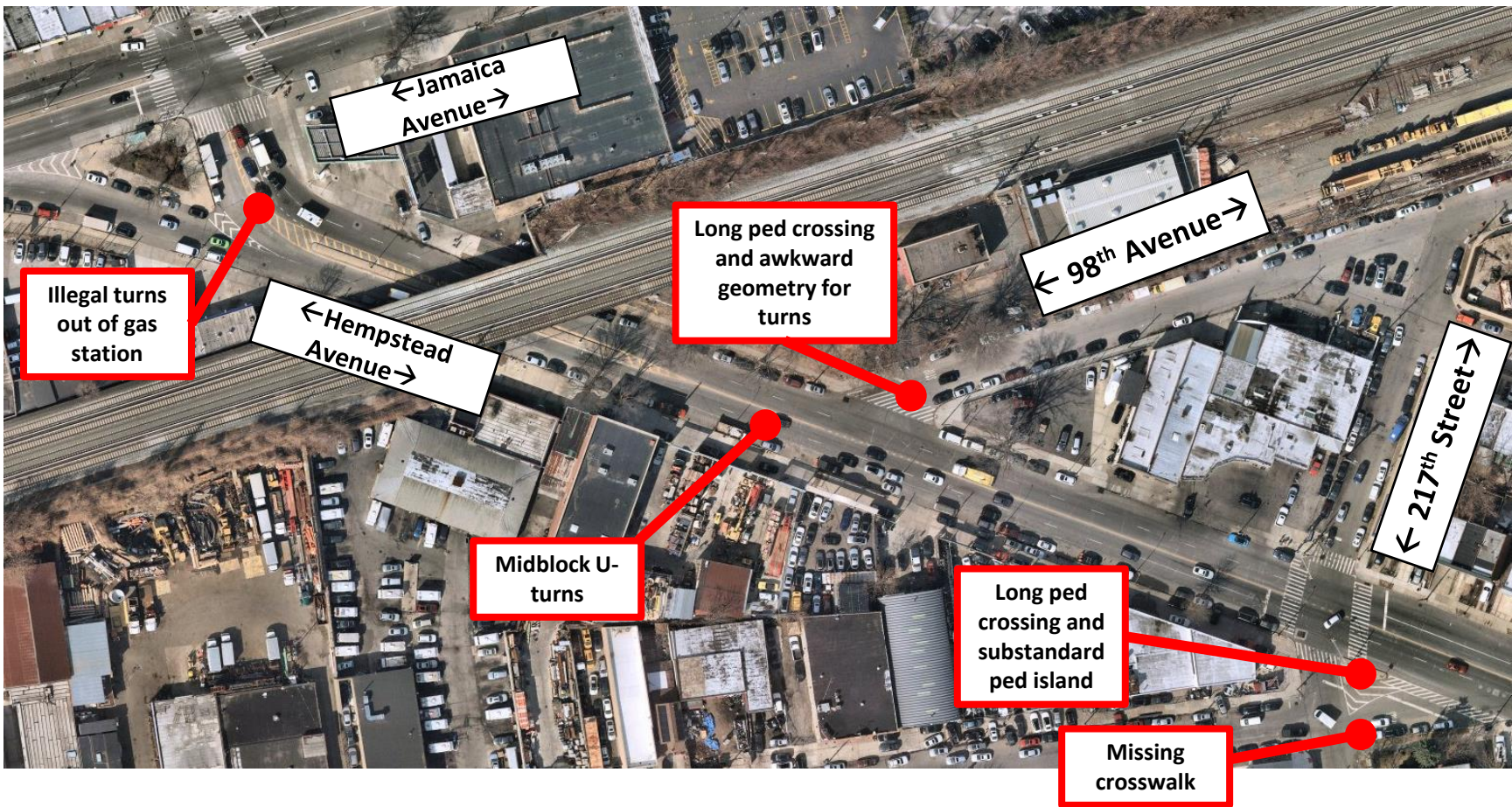


Overview of crash locations on Hempstead Avenue (Springfield Boulevard to 225<sup>th</sup> Street)



# Hempstead Avenue – Existing Conditions

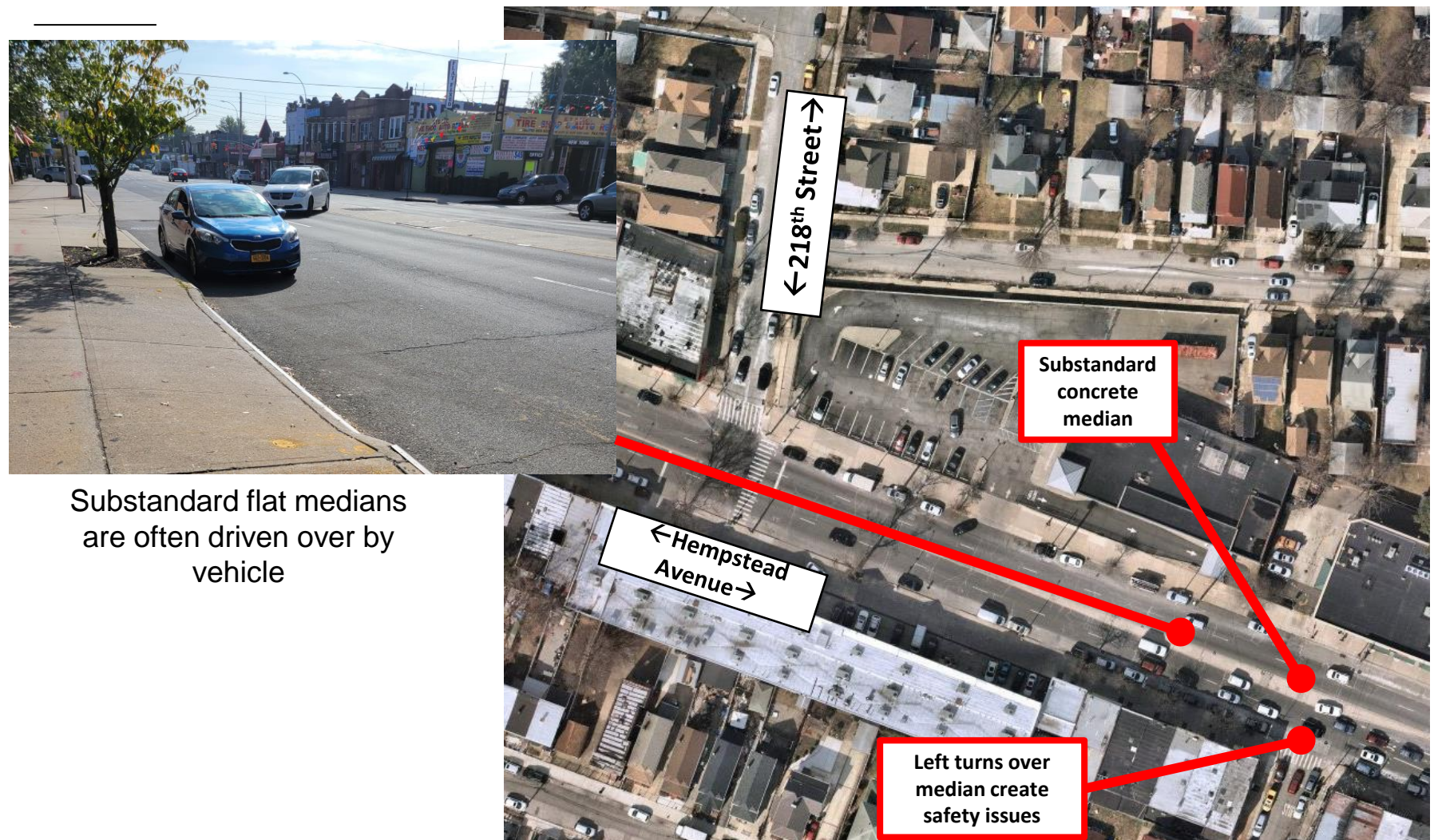
## Jamaica Avenue to 217<sup>th</sup> Street





# Hempstead Avenue – Existing Conditions

## 217<sup>th</sup> Place and 218<sup>th</sup> Street

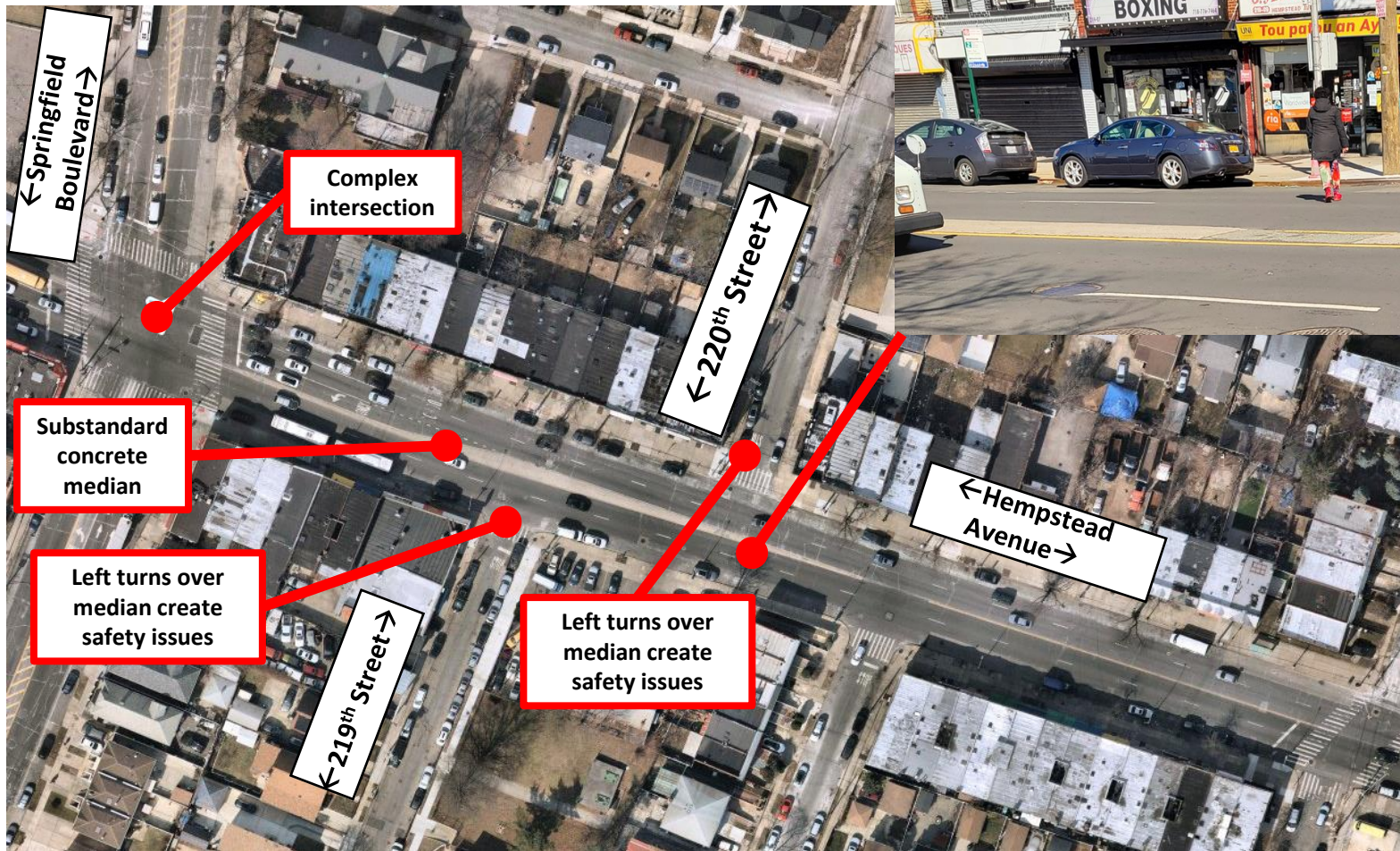


Substandard flat medians  
are often driven over by  
vehicle



# Hempstead Avenue – Existing Conditions

## Springfield Boulevard to 220<sup>th</sup> Street



Midblock crossing outside of crosswalk

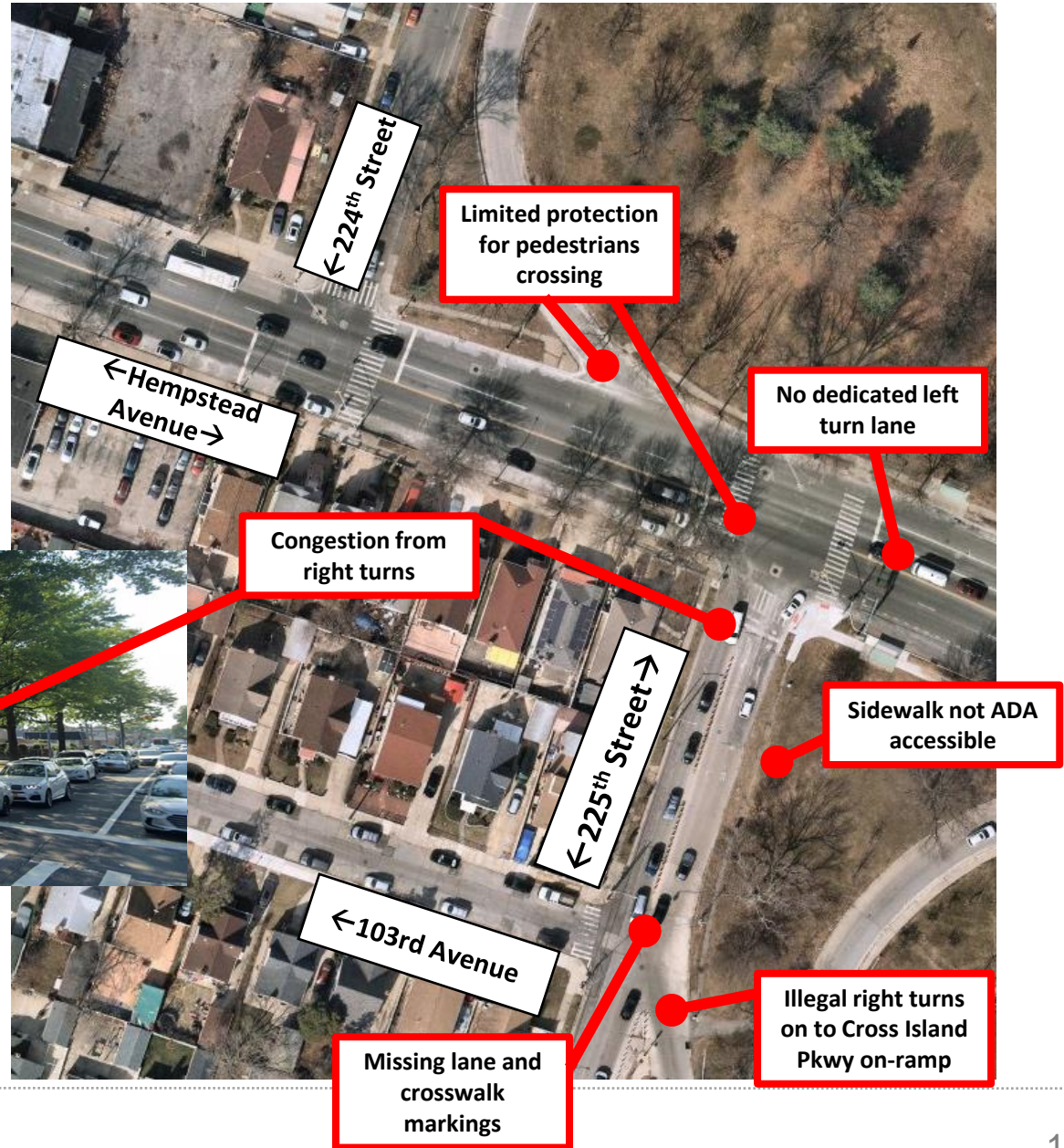


# Hempstead Avenue – Existing Conditions

## 225<sup>th</sup> Street/ Cross Island Parkway Area



Queue spillback from 225<sup>th</sup> Street to Hempstead Avenue

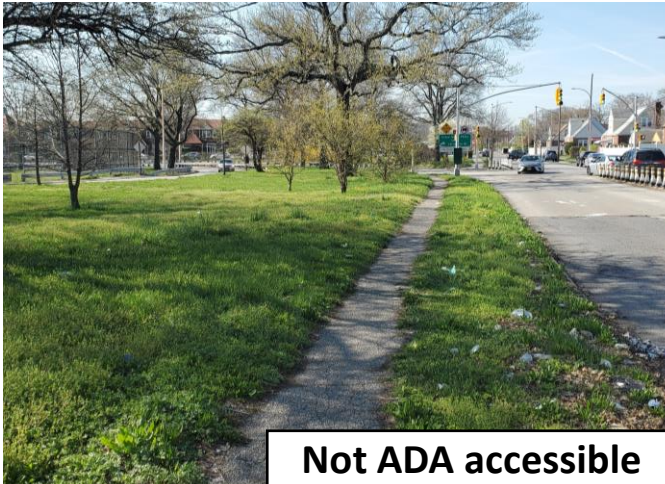




# Existing Conditions

## Hempstead Avenue Corridor

---



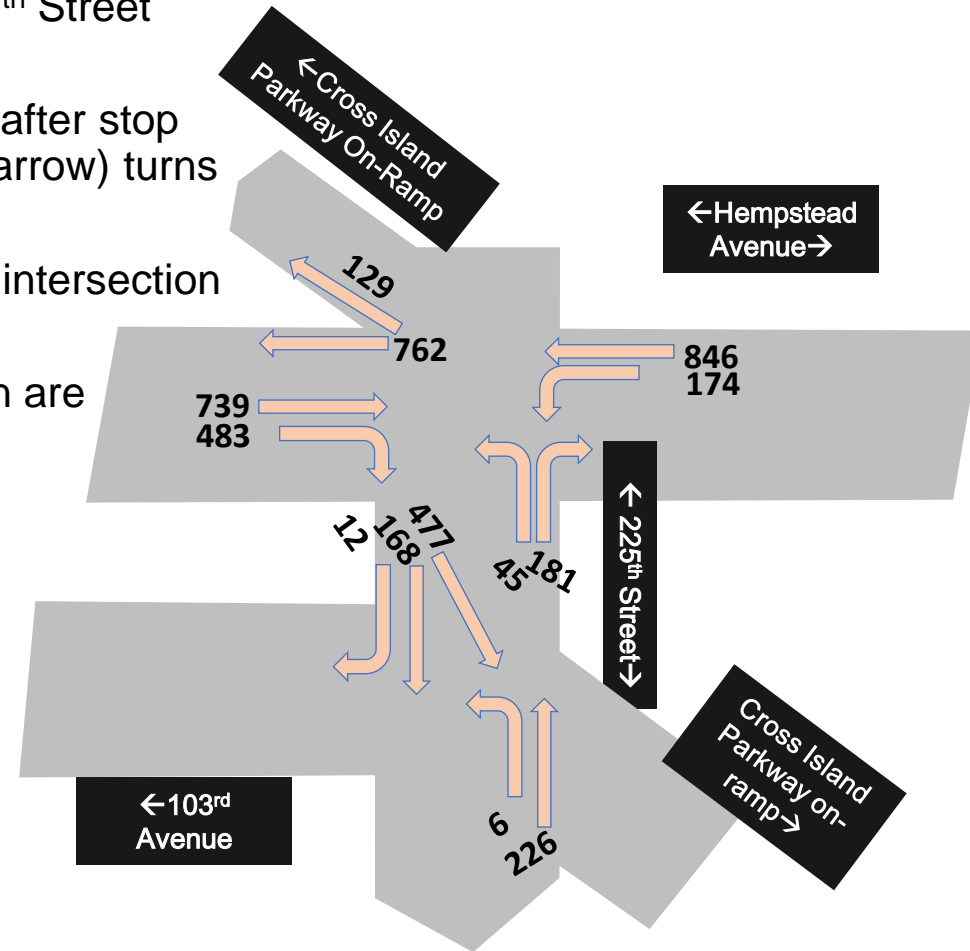
# Existing Conditions

## Peak Hour Traffic Count (PM Peak)

- Volumes are highest within the project area during the PM peak (4:45-5:45 PM, with 2465 vehicles at 225<sup>th</sup> Street intersection)
- Conflict between eastbound right (right on red after stop permitted) and westbound left (green left turn arrow) turns with existing conditions
- Around 5% of all vehicles passing through the intersection during peak periods are trucks
- Many vehicles passing through the intersection are accessing the Cross Island Parkway (73%)



Hempstead Avenue and 225<sup>th</sup> Street





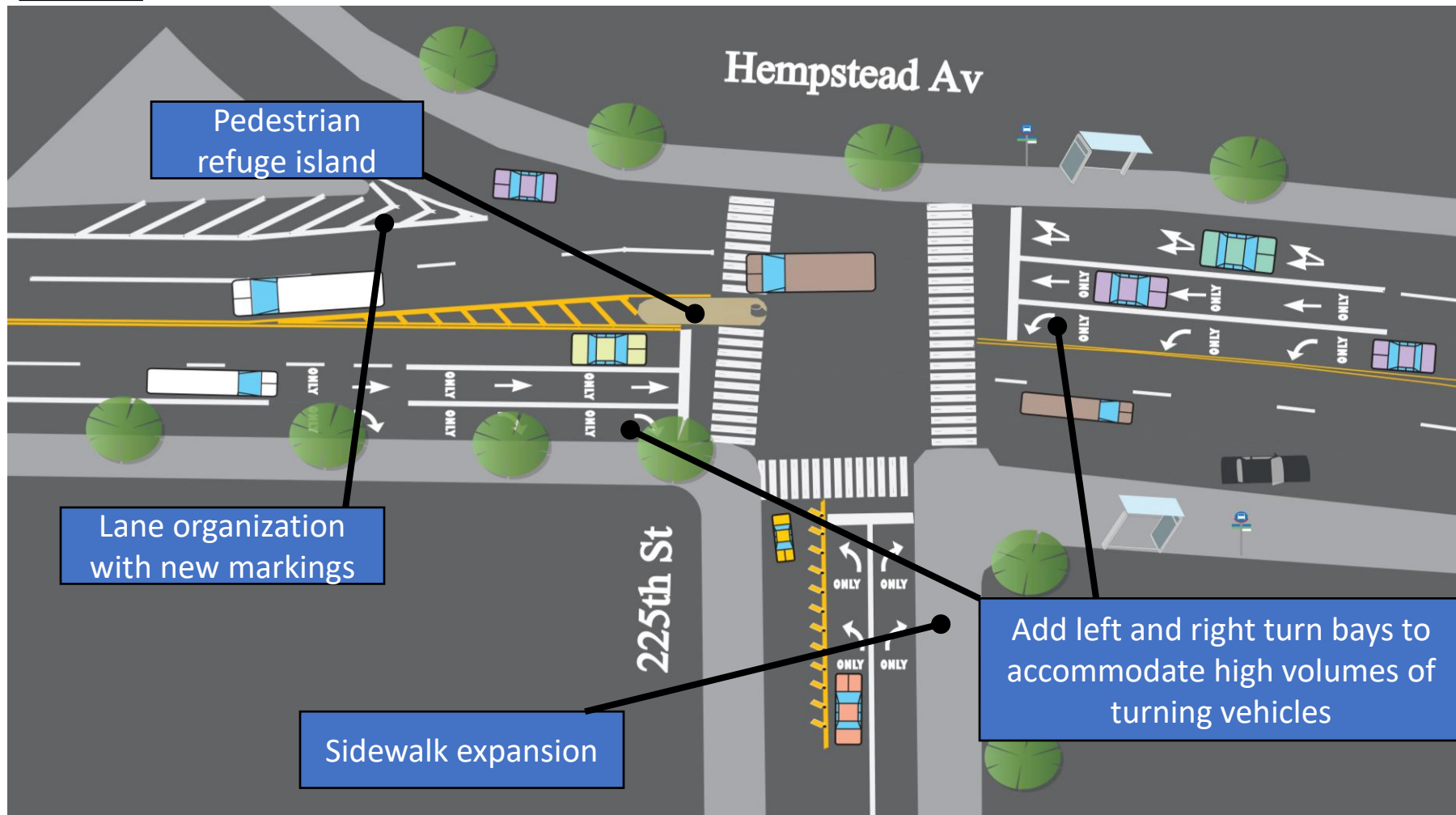
---

## Project Proposal

# 3

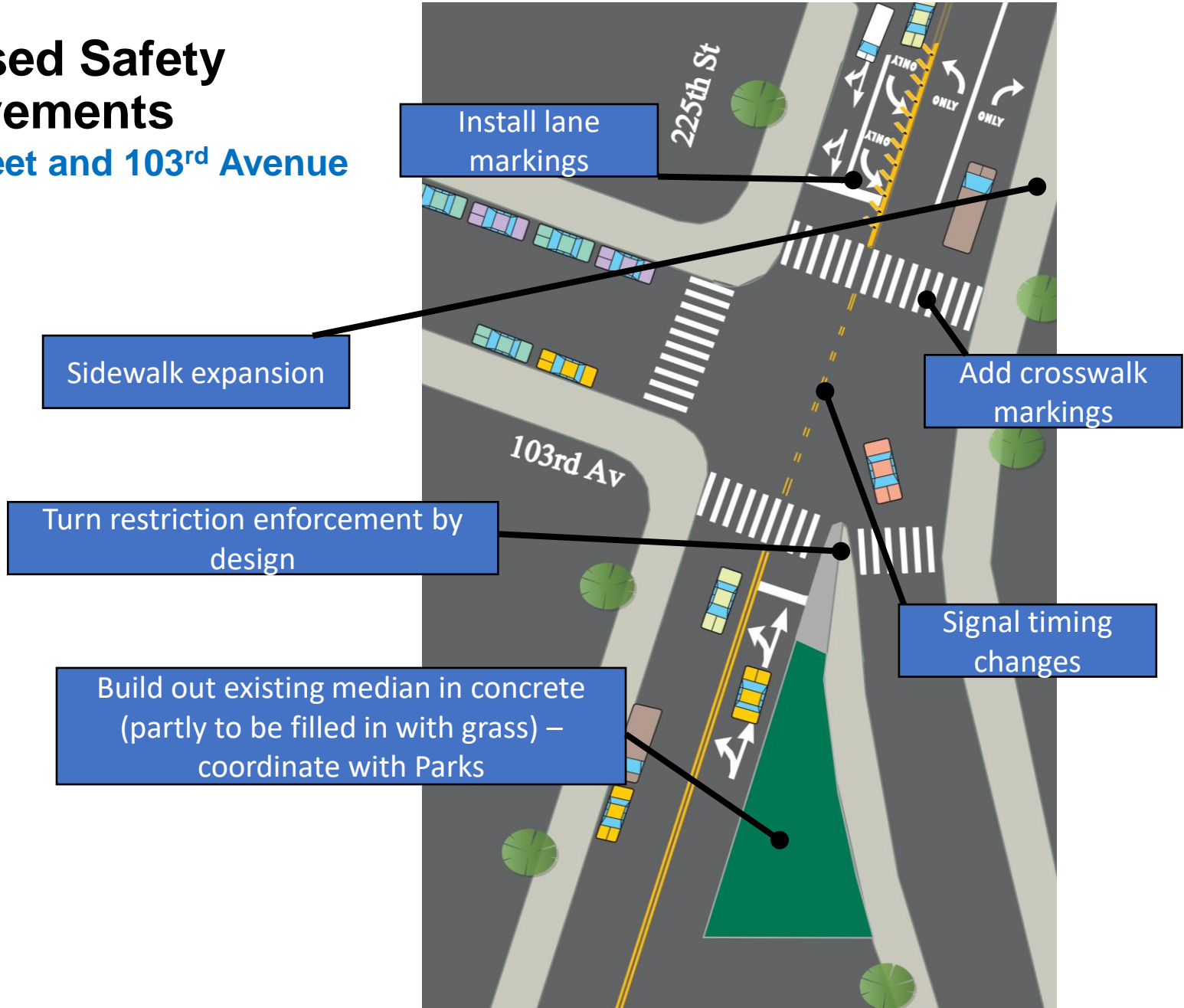
# Proposed Safety Improvements

## Hempstead Avenue and 225<sup>th</sup> Street



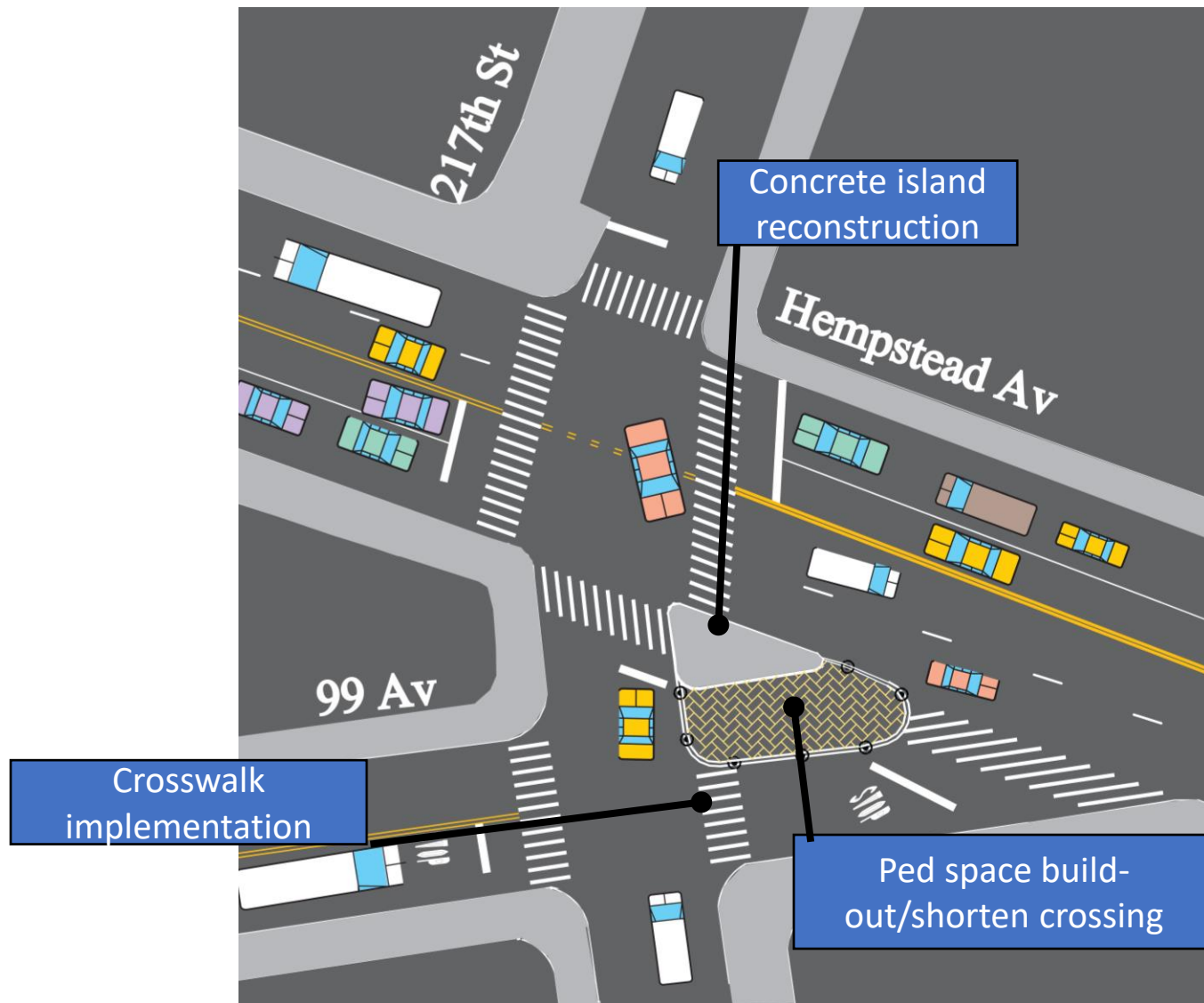
# Proposed Safety Improvements

## 225<sup>th</sup> Street and 103<sup>rd</sup> Avenue



# Proposed Safety Improvements

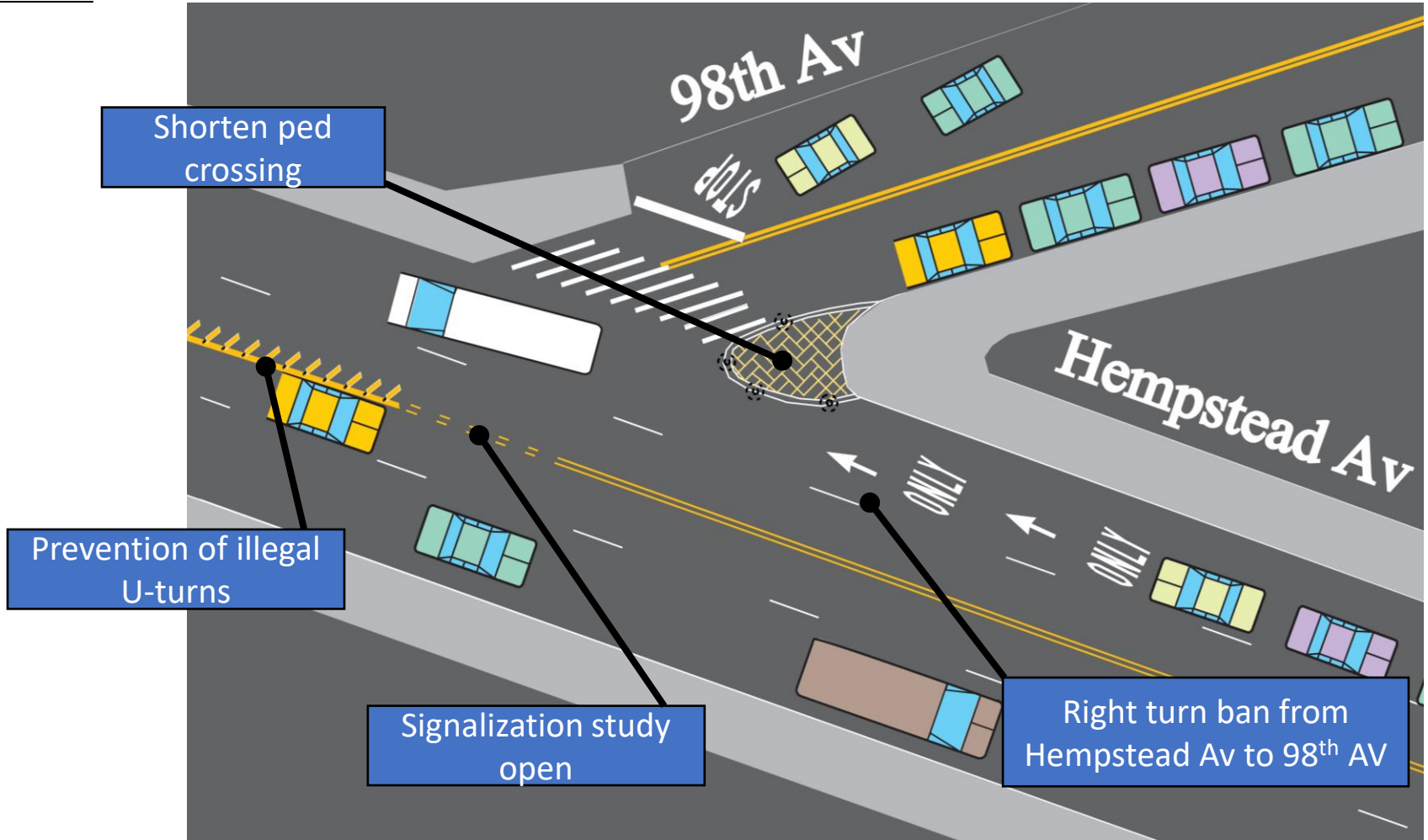
## Hempstead Avenue and 217<sup>th</sup> Street





# Proposed Safety Improvements

## Hempstead Avenue and 98<sup>th</sup> Avenue



# Project Benefits Summary

## Improving Corridor Safety

- Shorten crossing distances for pedestrians
- Provide pedestrian refuge space
- Improve accessibility
- Mitigate illegal turns by design
- Upgrade existing medians to standard



Reflective of the proposed condition for Hempstead Avenue at 225<sup>th</sup> Street (E 144<sup>th</sup> Street and Grand Concourse, Bronx)



Reflective of the proposed condition for 98<sup>th</sup> Avenue at Hempstead Avenue (South Williamsburg, Brooklyn)



---

Next Steps

4

# Next Steps

## Timeline

**Summer/Fall 2022:** Planned implementation  
(likely in phases)

**Winter 2022/23:** Post-implementation monitoring

### Safety

- Promote safety for all road users via street design

### Communication

- Follow-up and address issues and/or concerns identified by local stakeholders

### Continued Monitoring

- Continue to monitor conditions on Hempstead Avenue following implementation of safety enhancements



Hempstead Avenue and 98<sup>th</sup> Avenue



# Thank You!

Questions?



NYCDOT



nyc\_dot



nyc\_dot



NYCDOT